

1 CLAIMS:

2 1. A method of increasing the power handling capability of a  
3 power line, the method comprising:

4 providing a conductor configured to transmit energy intermediate  
5 plural locations;

6 supporting the conductor at a plurality of positions intermediate  
7 the locations, the supporting at a plurality of positions defining a  
8 plurality of spans of the conductor;

9 creating a model of the conductor;

10 identifying a critical span;

11 altering the modelled conductor responsive to the identifying; and  
12 analyzing the modelled conductor following the altering.

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14 2. The method according to claim 1 further comprising  
15 analyzing the modelled conductor at an increased operating condition  
16 and the identifying being responsive to the analyzing the modelled  
17 conductor at the increased operating condition.

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19 3. The method according to claim 1 further comprising  
20 supporting the conductor using a plurality of clamps.  
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Sub:  
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4. The method according to claim 3 wherein the altering the modelled conductor includes at least one of removing a portion of the modelled conductor and adjusting the positioning of one of the clamps within the modelled conductor.

5. The method according to claim 1 further comprising identifying another critical span responsive to the analyzing.

6. The method according to claim 5 further comprising repeating the altering and analyzing following the identifying the another critical span.

7. The method according to claim 1 further comprising optimizing including repeating the altering and the analyzing.

8. The method according to claim 1 wherein the analyzing comprises using a digital computer.

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1 9. A method of increasing power handling capability of a  
2 power line, the method comprising:

3 providing a conductor configured to transmit energy intermediate  
4 plural locations;

5 supporting the conductor using a plurality of clamps; and

6 altering the conductor including at least one of removing a  
7 portion of the conductor and adjusting the positioning of one of the  
8 clamps relative to the conductor.

9 *gib*  
10 *u3* 10. The method according to claim 9 further comprising:

11 creating a model of the conductor;

12 analyzing the modelled conductor at an increased operating  
13 condition; and

14 identifying a critical span responsive to the analyzing.

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16 11. The method according to claim 10 wherein the altering is  
17 responsive to the identifying.

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19 12. The method according to claim 10 further comprising:  
20 altering the modelled conductor following the identifying; and  
21 analyzing the modelled conductor following the altering of the  
22 modelled conductor.  
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13. The method according to claim 12 further comprising optimizing including repeating the altering and the analyzing of the modelled conductor.

14. A method of increasing the power handling capability of a power line, the method comprising:

providing a conductor configured to transmit energy intermediate plural locations;

creating a model of the conductor;

first analyzing the modelled conductor at an increased operating condition;

identifying a critical span responsive to the first analyzing;

altering the modelled conductor responsive to the identifying; and second analyzing the modelled conductor following the altering.

15. The method according to claim 14 wherein the first analyzing comprises analyzing the modelled conductor at a maximum operating temperature.

16. The method according to claim 14 wherein the first and second analyzings individually comprise using a digital computer.

17. The method according to claim 14 further comprising supporting the conductor using a plurality of clamps.

1 18. The method according to claim 17 wherein the altering  
2 includes at least one of removing a portion of the modelled conductor  
3 and adjusting the positioning of one of the clamps within the modelled  
4 conductor.

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6 19. The method according to claim 14 further comprising:  
7 identifying another critical span responsive to the second analyzing;  
8 and  
9 altering the modelled conductor following the identifying another  
10 critical span.

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12 20. The method according to claim 14 further comprising  
13 optimizing including repeating the altering and the second analyzing.  
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